California MEDICINE

OFFICIAL JOURNAL OF THE CALIFORNIA MEDICAL ASSOCIATION

VOL. 75 OCTOBER 1951 No. 4

Specialist-General Practitioner Cooperation in an Obstetrical Department

BLAKE H. WATSON, M.D., *Los Angeles*

SUMMARY

At a private hospital not affiliated with a teaching institution, a system was set up in the obstetrical department under which general practitioners carrying out deliveries had the advice and aid of specialists in obstetrics and were required to call for it in stated circumstances. General practitioners carried out about half of the 17,076 deliveries at the hospital in an eight-year period. Teamwork was stressed. Results were comparable with those reported from many of the well-known institutions.

In addition, a special anesthetic service was organized for the obstetrical department. Anesthesia was administered by young physicians who not only were versed in anesthetic procedures but had special training in obstetrics.

The service was available at any hour, and the physician carrying out delivery could count upon competently administered anesthesia when it was needed, as well as upon consultation and assistance should the need arise.

SINCE the obstetrical department of St. John's Hospital, Los Angeles, admitted its first patient in November 1942, there have been some 17,000 deliveries. About half of the patients were admitted under the care of general practitioners.

Chairman of obstetrical department, St. John's Hospital, Los Angeles.

Presented before the Section on Obstetrics and Gynecology at the 80th Annual Session of the California Medical Association, Los Angeles, May 13 to 16, 1951.

The data in the accompanying tables indicate the various methods of treatment used and the results. The incidence of various abnormalities was quite similar to that reported from many of the well-known institutions of the country. The ultimate end results in terms of maternal mortality, maternal morbidity, stillbirths, and neonatal deaths compare most favorably with results in the better known teaching and private hospitals where practice is entirely confined to physicians qualified under the term "obstetrical specialists."

Under the heading "Supervision" in Paragraph 5 of "The Minimum Standard for Obstetrical Department in Hospitals"—as demanded by the American College of Surgeons—appears the following requirement: "The obstetrical division of the medical staff shall be so organized as to exercise adequate control over the obstetrical work done in the hospital, such organization to include a chief or head of the department or service who shall be responsible for the general supervision of the professional activities of the department."

In order to exercise adequate control, the quality of work done by each physician engaged in the practice of obstetrics in the department must be known. Therefore, at St. John's Hospital all were classified into two major groups. This classification was arrived at after careful examination of creden-

TABLE 1.—*Presentation and Positions in 17,076 Deliveries*

Vertex		
a. Occiput anterior	14,820	(85%)
b. Occiput posterior	1,410	(8%)
Breech	636	(3.7%)
Brow	16	
Face	30	
Transverse	18	

TABLE 2.—*Method of Delivery*

Total	17,076
Spontaneous	10,264
Low-forceps	4,576
Mid-forceps	97
High-forceps	4
Manual rotation with forceps (mid and low)	530
Forceps rotation with extraction	213
Craniotomy	2
Podalic version and extraction	37
Cesarean section	891
Breech	636

TABLE 3.—*Data on Breech Deliveries (524 Consecutive Cases, Jan. 1, 1943, to Dec. 31, 1949)*

Total number deliveries	14,229	
Total number breech deliveries	524 or	3.68%
Type of Delivery	No.	Per Cent
Decomposition of breech and extraction	32	6.1
Spontaneous with breech assistance	440	83.9
Cesarean section	52	10.0
Forceps to after-coming head	35	6.6
Maternal morbidity	17	3.2
Fetal mortality (uncorrected)	80	15.2
Fetal mortality (corrected)	7	1.3
Maternal mortality		None

tials bearing details of training, practical experience and qualification by major obstetrical boards. This was followed by personal observation of the individual's handling of normal and abnormal procedures in the department itself and his ability as demonstrated during this period of probation.

Group A consisted of physicians permitted to carry out all types of obstetrical procedures, consultation being required only in cases of cesarean section. This group included all qualified obstetricians.

Group B consisted of physicians permitted to practice obstetrics in the department but restricted to cases in which the delivery was normal and uncomplicated. Should complications arise, one of the consulting staff must be called in to aid in the conduct of the case wherever possible or, if necessary, take over until safe delivery is accomplished.

The physicians in Group B are required to call for consultation:

1. Prior to any obstetrical operation, with the exception of episiotomy or prophylactic use of low forceps.

2. For induction of labor by the use of pituitary extract or rupture of the membranes.

3. In any case in which the patient has been over 12 hours in active labor or in which the membranes have been ruptured for 12 hours.

4. In all cases of toxemia.

5. In any case in which the patient is admitted with evidence of bleeding, before, during or after parturition.

6. In any case of abnormal presentation, including primiparous breech.

7. Prior to cesarean sections.

8. In any case of postpartum complication such as pyrexia, thrombophlebitis, etc.

This consultation service was provided by a group, designated as obstetrical consultants, appointed by the obstetrical committee. The consultants gave their service free of charge to the patient as a service for better obstetrics, except in instances in which the attending physician advised that a fee should be charged.

In approximately 95 per cent of cases, consultation was gratis.

Consultants have been encouraged to attempt close relationship with the general practitioners in this supervisory and consultant capacity. The aim has been to impart a general feeling of working as a team for the good of the patient and to avoid any implication that the consultant is trying to steal the glory and the patient from the practitioner who admitted the patient to the department. Following cesarean section, the general practitioner is encouraged to carry out the daily postpartum care, although the operating surgeon must also continue observation and daily visits. Standard techniques for labor and delivery room, to be followed by all physicians and the nursing staff, were set up and posted.

Luncheons which all physicians doing obstetrics are urged to attend are held monthly. A detailed obstetrical report is available to each physician attending. The report contains data on the following: Presentation and position; lacerations; anesthesia (type used); toxemia; prolonged labor; type of de-

TABLE 4.—*Cesarean Sections*

	Total	Repeat	Incidence (Per Cent)
1943	57	7	3.3
1944	81	12	4.5
1945	89	13	5.1
1946	115	16	6.0
1947	133	37	5.6
1948	120	24	5.3
1949	133	41	5.8
1950	132	38	5.4
	860	188	4.8

Deaths, 2 (2.3 per cent)

TABLE 5.—*Data on Stillbirths*

	Total	Under 30 Weeks	Under 36 Weeks	Full Term
1943	23	10	4	9
1944	21	10	5	6
1945	24	8	3	14
1946	30	12	5	13
1947	26	13	2	11
1948	26	10	5	11
1949	27	9	6	12
1950	29	12	8	9
	206 (1.2%)	84 (0.5%)	38 (0.2%)	85 (0.52%)

TABLE 6.—*Neonatal Deaths*

	Total	Under 30 Weeks	Under 36 Weeks	Full Term
1943	22	9	5	8
1944	24	6	9	9
1945	25	8	12	3
1946	37	23	5	9
1947	31	21	1	9
1948	31	19	5	7
1949	34	16	4	6
1950	24	10	6	8
	228 (1.28%)	112 (0.7%)	47 (0.3%)	59 (0.4%)

TABLE 7.—*Maternal Mortality*

1943	0	
1944	0	
1945	3	
1946	0	
1947	1	
1948	1	
1949	2	
1950	0	
	7	(0.04%)

livery; episiotomy; spinal anesthesia; hemorrhages; tumors associated with pregnancy. A summary of all cesarean sections, stillbirths, neonatal deaths and maternal deaths is carefully prepared by the resident. Free discussion is encouraged and criticism is welcomed. Reports on interesting cases taken only from the department are presented and discussed. Specialists in other fields, such as internists and radiologists, are invited to correlate factors relating to their specialties with the case in question.

OBSTETRICAL ANESTHESIA

During the first three years of this program, obstetrical anesthesia was administered by the Sisters and by nurses. Not all of them were well trained in the art of anesthesia. With the introduction of spinal block, it was imperative that trained anesthesiologists be introduced into the department. (The author is of the opinion that spinal anesthesia should not be administered by the attending physician, because as he must leave the head of the table to carry out the delivery, he cannot constantly observe the patient for changes in blood pressure and respiratory rate, vomiting, etc. This opens the door to accidents which are avoidable if careful observation is maintained.) The department of anesthesia was approached, but for many reasons a working regime could not be guaranteed at all times. For this reason, a branch of obstetrical anesthesia was formed in the obstetrical department. Four young qualified obstetricians, all of whom had given obstetrical anesthetics in many cases, were chosen. One of them had administered caudal anesthesia in over a thousand cases. (Caudal anesthesia is not encouraged in the department of anesthesia in this hospital.) All of them had an intense interest in obstetrics and none of them was so well established in private practice that he could not devote a good deal of time to the assignment. With this nucleus, all anesthesia given in the obstetrical department was administered by trained men. It was required that one of these men be on duty in the hospital at all times. The four physicians with whom the service was begun have in turn trained other young qualified physicians. It is hoped that by following this course the system can be continued until something more satisfactory can be achieved. These physicians who administer the anesthesia are paid for their services on an individual fee basis, for which the patient is responsible.

The system outlined has an important place in the obstetrician-general practitioner team. Not only does it provide well administered anesthesia, but in times of emergency there is at hand a well trained, qualified obstetrician who can give help when it is needed, advice when it is desired, and if necessary can take over the delivery. In many cases in which complications such as prolapse of the cord or terminal abruptio placentae occurred, the presence of an experienced obstetrician has been of great benefit. Moreover, it is reassuring to know that, in case of hemorrhage or shock, a physician experienced in the proper therapy in the form of plasma, blood, oxygen, etc., is standing by. The aid of physicians with knowledge of resuscitation of the newborn and of endotracheal catheterization has prevented infant deaths on many occasions. The constant presence of an experienced obstetrician in the confines of the obstetrical department is also a comfort to members of the attending nursing, resident and intern staff who may seek his counsel in event of complications.

It is the duty of physicians, whether obstetricians

TABLE 8.—*Causes of Maternal Death*

1. Toxemia of pregnancy (acute yellow atrophy).
2. Toxemia of pregnancy (eclampsia with cerebral accident).
3. Cardiac disease in pregnancy (acute right-sided heart failure).
4. Postpartum air embolism (spontaneous delivery).
5. Toxemia of pregnancy (eclampsia—generalized arteriosclerosis).
6. Cardiac death intrapartum (coronary spasm due to ergotrate given intravenously).
7. Prepartum cerebral vascular accident (thrombosis sagittal sinus). Postmortem cesarean section successful.

TABLE 9.—*Obstetrical Anesthesia*

Year	Total Deliveries	Anesthesia Employed: Inhalation No.	Pct.	Spinal No.	Pct.	Miscellaneous
1943	1,722	1,711	(99.36)	9	(00.36)	2 pentothal, 5 none
1944	1,781	1,769	(99.32)	3	(00.34)	3 none
1945	1,710	1,689	(98.77)	19	(1.2)	2 caudal
1946	1,911	1,504	(78.70)	402	(21.03)	2 caudal, 3 none
1947	2,336	1,079	(46.19)	1,249	(53.47)	8 none
1948	2,252	1,070	(47.51)	1,168	(51.86)	14 none
1949	2,300	1,154	(50.20)	1,123	(48.80)	1 local, 22 none
1950 (Through June)	1,138	574	(50.50)	555	(48.70)	1 local, 8 none

or general practitioners, who care for parturient women, to do their utmost to deliver a healthy infant without damage to the child or to the mother. It is consistent with this duty to seek and to give help and advice and to pool knowledge in a common effort to perform good safe obstetrics. In doing so lies hope for nearly perfect results.

10962 Le Conte Avenue.

Discussion by ROBERT H. FAGAN, M.D., *Beverly Hills*

With regard to Dr. Watson's paper, there are three points that I feel could bear even further emphasis: First, the fact that the statistics are from a non-teaching hospital. Second, the fact that 50 per cent of the cases were managed by general practitioners. Last, Dr. Watson's system of providing obstetric anesthetists—a system which I, as an attending obstetrician, have found gratifying and practical.

Formerly, statistics such as these occurred only in teaching hospitals where the standards of medical care have been traditionally high. In recent years, reports from private hospitals all over the country show similarly remarkable records. This is an admirable transition, for obviously not every hospital can be associated with a medical school and, when records such as these occur, we may feel assured that better medical care is becoming more universal and is not necessarily limited to the so-called "fountains of learning." As a matter of fact, because teaching hospitals must necessarily be ultra-conservative, many advances in obstetric procedures now arise in the private institutions. However, in the comparison of mortality statistics, one must remember, in fairness to all, that many teaching and general hospitals have large indigent clienteles, where malnutrition, poverty and lack of cooperation of patients augment obstetrical disasters.

The fact that 50 per cent of the deliveries in St. John's Hospital were managed by general practitioners is interesting and tends to support the general trend in medical education that there is a need for general practitioners, even in large metropolitan areas. The over-all obstetrical care in a community may be improved by making arrangements for general practitioners to work in cooperation with the obstetrical specialists in hospitals where consultation and help in emergencies is readily at hand. In hospitals lacking this supervision, results are not so favorable.

Probably there has been no factor in obstetrics so unsatisfactory as being unable to procure hurriedly at all times a good obstetric anesthetist. I believe it is understandable that certified anesthetists should choose not to give obstetric anesthesia because of the long and uncertain hours. The procedure at St. John's as outlined by Dr. Watson is one of the most gratifying arrangements that I have experienced in over 20 years of obstetric practice. The realization that there is constantly available a physician well trained in obstetrics, as well as in obstetric anesthesia, affords to all concerned great security in emergencies.

These obstetrician-anesthetists must be qualified in various techniques of obstetric anesthesia and this ability may be and should be acquired, in my opinion, by all obstetricians during their hospital training. In addition to the obvious advantages to the patients, the nurses and the attending physicians, the benefits to these young men are very great. They profit greatly by observing the conduct of labor of their older confreres. One of the unfortunate aspects of obstetric practice is that often after a physician leaves his formal training he never again observes a colleague conduct a delivery. It is amazing how many variations in procedures are improvements over the techniques one has originally acquired, and it is by the observation of a large number of competent obstetricians at work that younger men may ultimately perfect the techniques of delivery best adapted to their own capabilities. Moreover, the first few years of obstetric practice are necessarily lean ones financially, for in contradistinction to other branches of medicine, the young obstetrician has no available insurance work or industrial contracts which help a young physician pay his overhead. The fees that may be charged for obstetric anesthesia, therefore, are most welcome. The patients, the delivery room personnel, the attending physicians and the younger physicians all profit. As far as I can see, there are no objections to this arrangement. I heartily commend it as the most satisfactory method of handling this major obstetrical problem that I have personally observed. I believe Dr. Watson and the personnel of St. John's Hospital are to be congratulated for the excellent record they have established.